

**ROLE OF PROBIOTICS AS A THERAPEUTIC TOOL ON  
GASTROINTESTINAL DISEASES IN MICE AND STUDY OF  
INTESTINAL IMMUNOMODULATION**

**Thesis Submitted to the Vidyasagar University in partial fulfillment  
of requirements for the degree of Doctor of Philosophy (Ph.D.) in  
Biochemistry**

**Submitted by  
Atrayee Roy**

**Department of Biochemistry  
Vidyasagar University  
West Bengal  
2020**